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See application file for complete search history.

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(57) **ABSTRACT**

A disclosed code-division-multiple-access (CDMA) system has a base station (BS) and remote stations (RSs). A BS-spread-spectrum transmitter broadcasts a common-synchronization channel having a chip-sequence signal common to the remote stations served by the BS, and a frame-timing signal. A RS-spread-spectrum receiver receives the broadcast common-synchronization channel, and determines frame timing from the frame-timing signal. A first RS-spread-spectrum transmitter transmits an access-burst signal, which has a plurality of segments. Each access burst signal segment has a plurality of power levels. A BS-spread-spectrum receiver receives the access-burst signal at a detected-power level. In response to receiving the access-burst signal, a BS-spread-spectrum transmitter transmits an acknowledgment signal to the RS-spread-spectrum receiver. The RS-spread-spectrum receiver receives the acknowledgment signal, and in, the RS-spread-spectrum transmitter transmits a spread-spectrum signal having data to the BS-spread-spectrum receiver.

97 Claims, 11 Drawing Sheets